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nized as an egg. It measured 11 by 6 mm. and was a dead white with a rather tough shell and of a regular elipsoidal outline. The female evidenced considerable interest while the egg was removed for examination, twisting and craning its neck in a most curious and inquisitive manner. Then when the egg was returned and placed on top of the flower pot she made quite a commotion moving about near and around the egg. In the afternoon some leaf mould and sphagnum moss was placed on the earth and banked up around the egg for fear that it might be harmed if left entirely exposed. Later that day another egg was found near the first one which had probably been laid some time before. This was dark brown in color from resting on the soil and rather shriveled. It was then that a half made hole was observed, and the peculiar actions of this lizard two days previously were recalled when rather similar activity had been noted. By the time eight days had passed the second egg had assumed the appearance of the first, being shrunken and dark brown, having apparently likewise taken this color from the earth upon which it rested. In this manner the eggs finally shriveled away.

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TOADS IN REGULATING INSECT OUTBREAKS

The importance of toads in assisting to check insect outbreaks was remarkably illustrated in Cache County, Utah, last August. The third brood of the sugar-beet webworm developed such proportions in the Benson district that many fields of beets were partly or wholly destroyed. As the webworms increased in number and size, however, natural enemies were attracted and did much to destroy the insects—but unfortunately not until great damage had been done. Among these enemies were astonishing num-

bers of our common toad, *Bufo woodhousii* Girard. Most of the toads were of this year's brood, ranging in length from one and a fourth to one and a half inches. I would estimate that in one field of about one square acre there were no fewer than one-hundred toads.

An examination of the stomach contents of a number of toads disclosed the fact that they were feeding exclusively upon the webworms and that every one was gorged to the limit. These small toads contained from 24 to 40 worms each, the limiting factor in quantity being the size of the stomach. A number of representative toads were weighed, and the stomach contents of each were then removed and weighed. It was found that the contained food represented 16 percent of the total weight of the toad. If the toad fills its stomach four times every twenty-four hours, as Kirtland maintains,¹ these toads were daily eating a mass of webworms two-thirds their own weight!

From this case it would appear that the toad exhibits the same valuable adaptability in the presence of an insect outbreak as has been observed in birds. Not only is there a concentration in numbers of toads in the infested area, but the dominating insect, especially if present in great numbers, is eaten almost to the exclusion of the insects and other invertebrates normally constituting its food.

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¹U. S. Dept. Agr. Farmers' Bull. 196, p. 18.

HERPETOLOGICAL NOTES FROM NORTH CAROLINA

Red-backed Salamander (*Plethodon cinereus*, form *erythronotus*). The first capture of these salamanders in the vicinity of Raleigh occurred on May 7, 1921, when about fifteen or twenty of them were taken by Mr. Sherman and myself under rot-